IN THE SPECIFICATION

Please amend the specification as follows:

The paragraph beginning on page 8, line 8 is amended as follows:

Again, assuming an array size of 'R x C', and a frame time of 'T', each microbolometer in the array 110 could receive two or more "N" fast scanning bias pulses 510 having a time duration not exceeding (T/(N x R x C)) within the frame time 410. Alternatively, several microbolometers could be simultaneously provided with two or more longer bias pulses 510. Because, fast scanning requires more frequent bias pulses, fast scanning is most easily applied to small two dimensional arrays and linear arrays.

The paragraph beginning on page 8, line 14 is amended as follows:

Graph 500 also illustrates temperature variation in each microbolometer caused by the application of two or more bias pulses 510. It can be seen that the temperature variation of each microbolometer in the array 110 in each frame time 410 is significantly reduced by the fast scanning technique of the present invention (by applying a series of two or more bias pulses within the frame time 410). This is because the heating effect of each bias pulse is reduced by the number of bias pulses applied within the frame time. [If there are 'N' bias pulses applied within the frame time, the heating variation effect is reduced by a factor of N]. Also, due to the application of a series of [shorter bias pulses is less. Also the shorter time duration 520 between the] two or more bias pulses 510, the time duration 520 between each bias pulse 510 is shorter than the time duration 470 between bias pulses shown in Figure 4. This shorter time duration 520 between two or more bias pulses 510 allows less time for cooling to occur, thereby keeping [also reducing] the temperature variation to a minimum 530 as shown in Figure 5.

The paragraph beginning on page 11, line 13 is amended as follows:

The measuring circuit 930 is coupled to the microbolometer array 110 such that the measuring circuit 930 can measure two or more resulting signals associated with each of the two or more bias pulses 510 applied during the frame time 410. The computing circuit 940 is coupled to the measuring circuit 930 so that the computing circuit 940 receives the two or more resulting signals from the measuring circuit 930 and computes an average signal value for each of the received two or more resulting signals from the measuring circuit 930. Then the output circuit

950 coupled to the computing circuit 940 produces an output signal based on the computed average signal value associated with each of the microbolometers in the array 110 such that the output signal improves performance, sensitivity, and facility of operation of the microbolometer. The measuring circuit 930 can measure two or more resulting signals associated with each of the two or more bias pulses 510 and can [individually control] the two or more resulting signals. In some embodiments, the signal circuit can apply corrective signals to produce coarse non-uniformity correction.